

Claims: -

1. A method for identifying a gene having a role in the presentation  
5 of diabetic nephropathy, which method comprises culturing mesangial  
cells in a medium in the presence of a concentration of glucose  
sufficient to induce differential expression of a gene susceptible to such  
differential expression and identifying the gene so induced by  
suppression subtractive hybridisation.

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2. A method according to Claim 1, wherein the mesangial cells are  
cultured in the presence of a concentration of glucose sufficient to  
induce up-regulation of a gene susceptible to such up-regulation.

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3. A method according to Claim 1 or 2, wherein the concentration  
of glucose is greater than 5 mM.  
*sub 200*

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4. A method according to any preceding claim, wherein the  
mesangial cells are subjected to mechanical strain.

5. A method according to any preceding claim, wherein  
transforming growth factor  $\beta 1$  (TGF- $\beta 1$ ) is added to the culture  
medium.

6. A method according to any one of Claims 1-5, wherein the possibility of differential expression due to hyperosmolarity is excluded.

5 7. A method according to any one of Claims 1-6, wherein the gene so differentially expressed is a gene which includes a sequence selected from:

10 1) SEQ ID NOS: 1-3;

15 2) SEQ ID NO: 4;

*Beta  
gene* 3) SEQ ID NO: 5; and

4) SEQ ID NO: 6.

20 8. Use of a gene identified by a method according to any one of Claims 1-7, as a diagnostic marker for the progression and presentation of diabetic nephropathy.

25 9. Use of a gene identified by a method according to any of Claims 1-7, as an index of disease activity and the rate of progression of diabetic nephropathy.

10. Use of a gene identified by a method according to any of Claims 1-7, as a basis for identifying drugs for use in the prevention and/or therapy of diabetic nephropathy.

11. A sequence selected from any one of SEQ ID NOS: 1-3, 5 and 6 according to Claim 7.

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